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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,842	01/24/2001	Toshiyuki Waida	1081.1104/DSG	3353

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EXAMINER
KARMIS, STEFANOS

ART UNIT	PAPER NUMBER
3691	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/767,842	WAIDA ET AL.	
	Examiner	Art Unit	
	Stefano Karmis	3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-6 and 9-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-6 and 9-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to Applicant's amendment filed 06 February 2006.

Status of Claims

2. Claims 1, 5, 6, 10 and 15 are currently amended. Claims 4, 9, 11-14 are previously presented. Claims 2, 3, 7 and 8 are cancelled. Claim 16 is newly added. Therefore claims 1, 4-6 and 9-16.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 16, the phrase "generating an image of the payment form" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, has possession of the invention. Applicant teaches in the specification, that an image scanner reads in an image of the form and

send the image to a processing device (page 7, line 24 thru page 8, line 3). However, there is no mention in these passages of "generating" an image. Instead it appears that an image is scanned from an already existing image.

Continuing with claim 16, the phrase "predetermined character" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, has possession of the invention. The Examiner can find no teaching of "predetermined characters" in the specification.

Therefore it would not be obvious to one of ordinary skill in the art that images are generated or that characters are predetermined. Instead, it appears that an image already exists and is scanned in and there is no teaching of predefining characters. For interpretation purposes, claim 16 is interpreted to include an image of a payment form and to locate a character.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 4-6, 9-11, 13, 15 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al. (hereinafter Morita) U.S. Patent 6,885,769 in view of Deaton et al. (hereinafter Deaton) U.S. Patent 6,351,735 in further view of Sangu U.S. Patent 5,265,171.

Regarding independent claims 1, 6, 15 and 16, Morita teaches a payment form discrimination method for discriminating a payment form which states at least a payee account number and a payment amount, comprising: acquiring an image of the form by reading the form (column 5, lines 12-16); searching for the payee account number in the image in accordance with an account number searching rule (column 6, lines 22-49, column 9, lines 10-25 and Figure 3B); and discriminating the type of form based on the searched payee account number (column 11, lines 61-67 and column 13, lines 18-43); wherein said searching comprises: recognizing said payee account number in accordance with said account number searching rule in a searching table which registers recognition categories and regularities regarding a character string from the acquired image (column 16, line 53 thru column 17, line 11); and judging whether or not said recognized payee account number is matched with the registered account number in an account master table (column 16, line 53 thru column 17, line 11); and wherein said discrimination comprises discriminating the type of form by referring to a document information table that stores the account number and its type of the form by said judged payee account number (column 16, line 53 thru column 17, line 11).

Morita fails to teach that the searching for payee account number when it is in an unknown position on the form. Deaton teaches automatic check reading techniques that uses character recognition and the technique differs from standard techniques because in that it has the ability to detect an account number regardless of the location of the customer account number in a MICR code (column 12, lines 5-40 and column 24, line 63 thru column 25, line 6). Deaton teaches searching for the account number in an unknown position since it is not known where in the MICR code the account number is and it differs depending on banks and branches

(column 12, lines 5-40). It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the teachings of Morita and include the teachings of Deaton because it provides a system for handling image reading when processing business transactions. Morita teaches that image reading includes checks (column 1, lines 10-17) and deals with various formats (column 11, lines 61-67). Morita also teaches character recognition teachings to read account numbers, including account numbers in number strings (column 20, lines 21-60). Therefore, there is sufficient motivation to combine the teachings of Morita and Deaton.

Morita in view of Deaton in fail to teach that recognizing comprises: searching for hyphens and recognizing said payee account number in areas surrounding the hyphen. Sangu teaches an optical character reading apparatus for optically reading characters based on an interval of characters in a document, which includes a hyphen (Abstract). Sangu teaches that when a hyphen is present in a character code string for one word, the CPU determined the character code string as a compound word or as to one character code string of a separate word (column 6, line 53 thru column 7, line 29). Therefore it would have been obvious to modify the recognizing of account numbers as taught by Morita in view of Deaton to include searching for hyphens and determining the characters around the hyphen to determine the type of word as taught by Sangu because it provides for recognizing a series of characters that can be made up of letters, numbers or symbols and allows for computers to extract these character strings with more accuracy. There is further suggestion to combine because Deaton says account numbers can be recognized regardless of whether the account number is properly identified with spaces or symbols (column 25, lines 1-3). Therefore Deaton teaches account numbers often contain

symbols such as hyphens and applying the character recognition teachings of Sangu would therefore be an obvious expedient for a computer to determine the account number from an image.

Claims 4 and 9, Morita teaches recognizing a plurality of account numbers on the payment form; and merging a plurality of results, which have recognized to determine the payee account number (column 10, lines 35 thru column 11, line 17, column 20, lines 22-61 and Figure 13).

Regarding claims 5, 10, 11 and 13, Morita in view of Deaton teaches character recognition when reading an account number (column 6, lines 33-49). Morita in view of Deaton fails to teach recognizing a hyphen and searching the areas surrounding the hyphen for character specific regularities. Sangu teaches an optical character reading apparatus for optically reading characters based on an interval of characters in a document, which includes a hyphen (Abstract). Sangu teaches that when a hyphen is present in a character code string for one word, the CPU determined the character code string as a compound word or as to one character code string of a separate word by searching the characters around the hyphen (column 6, line 53 thru column 7, line 29). Therefore it would have been obvious to modify the recognizing of account numbers as taught by Morita in view of Deaton to include searching for hyphens and determining the characters around the hyphen to determine the type of word as taught by Sangu because it provides for recognizing a series of characters that can be made up of letters, numbers or symbols and allows for computers to extract these character strings with more accuracy.

7. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al. (hereinafter Morita) U.S. Patent 6,885,769 in view of Deaton et al. (hereinafter Deaton) U.S. Patent 6,351,735 in further view of Sangu U.S. Patent 5,265,171 in further view of Geisel et al. U.S. Publication 2002/0073060.

Regarding claims 12 and 14, Morita in view of Deaton in further view of Sangu teaches character recognition when reading an account number (column 6, lines 33-49). Morita in view of Deaton in further view of Sangu fails to specify merging a result from a rejected number of a plurality of character recognition results and a number of recognition characters. Geisel teaches a computer implemented method for item processing that provides confidence-based matching of unreadable characters during character recognition in an attempt to determine the proper character (page 3, paragraph 0036). Therefore it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the teachings of Morita in view of Deaton in further view of Sangu to include merging results from a reject number of plurality of said character recognition and recognition characters because it allows for accurately reading of account numbers on an image by a computing device even when there could be a minor or obvious exception in the account number. There is further suggestion to combine in that it provides flexibility, similar to the teachings of Deaton, which provide for recognizing account numbers regardless of whether other characters or symbols are present (column 25, lines 1-3).

Response to Arguments

8. Applicant's arguments with respect to claims 1, 4-6 and 9-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefano Karmis whose telephone number is (571) 272-6744. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alex Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully Submitted
Stefano Karmis
25 April 2007

HANI M. KAZIMI
PRIMARY EXAMINER